

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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Washington, D.C. 20231

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

08/08/2002

JENNIFER WAHLSTEN RAE-VENTER LAW GROUP, P.C. 260 SHERIDAN AVE, SUITE 440 PALO ALTO, CA 94306 EXAMINER

NELSON, AMY J

ART UNIT CLASS-SUBCLASS

800-278000

1638
DATE MAILED: 08/08/2002

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 08/984,099 12/03/1997 KEVIN MCBRIDE CGNE-115-1-U 1773

TITLE OF INVENTION: COTTON FIBER TRANSCRIPTIONAL FACTORS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUÉ
nonprovisional	NO	\$1280	\$0	. \$1280	11/08/2002

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

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B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

 Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



PART B - FEE(S) TRANSMITTAL



-Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE

Commissioner for Patents Washington, D.C. 20231 (703)746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up) with any corrections or use Block 1

08/08/2002

JENNIFER WAHLSTEN RAE-VENTER LAW GROUP, P.C. 260 SHERIDAN AVE, SUITE 440 PALO ALTO, CA 94306

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile transmitted to the USPTO, on the date indicated below.

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(Depositor's name)		
(Signature)		
(Date)		

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/984,099	12/03/1997	KEVIN MCBRIDE	CGNE-115-1-U	1773
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nonprovisional	NO	\$1280	\$0	\$1280	11/08/2002
EXAMI	NER	ART UNIT	CLASS-SUBCLASS		
NELSON	AMY J	1638	800-278000		
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.		2. For printing on the patent from the names of up to 3 registered or agents OR, alternatively, (2) single firm (having as a membattorney or agent) and the name registered patent attorneys or agent is listed, no name will be printed.	patent attorneys the name of a per a registered nes of up to 2		

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (B) RESIDENCE: (CITY and STATE OR COUNTRY) (A) NAME OF ASSIGNEE

Please check the appropriate assignee category or	categories (will not be printed on the patent)	individual 🗅	corporation or other private group entity	y 🚨 governmen			
4a. The following fee(s) are enclosed:	4b. Payment of Fee(s)						
☐ Issue Fee ☐ Publication Fee	A check in the amount	☐ A check in the amount of the fee(s) is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached.					
	☐ Payment by credit c						
Advance Order - # of Copies	The Commissioner Deposit Account Num	☐ The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number(enclose an extra copy of this form).					
Commissioner for Patents is requested to apply the	e Issue Fee and Publication Fee (if any) or to	re-apply any previo	ously paid issue fee to the application identify	fied above.			
(Authorized Signature)	(Date)						
NOTE: The Issue Fee and Publication Fee (if	required) will not be accented from anyon						

other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Paient and Trademark Office, U.S. Department of Commerce, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/984,099	12/03/1997	KEVIN MCBRIDE	CGNE-115-1-U	1773
74	590 08/08/2002		EXAMINI	ER
JENNIFER WAHLSTEN			NELSON, AMY J	
RAE-VENTER LA 260 SHERIDAN A			ART UNIT	PAPER NUMBER
PALO ALTO, CA	94306		1638	
UNITED STATES			DATE MAILED: 08/08/2002	

Determination of Patent Term Extension under 35 U.S.C. 154 (b) (application filed after June 7, 1995 but prior to May 29, 2000)

The patent term extension is 0 days. Any patent to issue from the above identified application will include an indication of the 0 day extension on the front page.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)



United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/984,099	12/03/1997	KEVIN MCBRIDE	CGNE-115-1-U	1773
75	90 08/08/2002		EXAMIN	ER
JENNIFER WAF	ILSTEN		NELSON, A	AMY J
RAE-VENTER LA 260 SHERIDAN A			ART UNIT	PAPER NUMBER
PALO ALTO, CA	94306		1638	
UNITED STATES			DATE MAILED: 08/08/2002	

Notice of Possible Fee Increase on October 1, 2002

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2002, then the amount due may be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there may be an increase in fees effective on October 1, 2002. See Revision of Patent and Trademark Fees for Fiscal Year 2003: Notice of Proposed Rulemaking, 67 Fed. Reg. 30634, 30636 (May 7, 2002). Although a change to the amount of the publication fee is not currently proposed for October 2002, if the issue fee or publication fee is to be paid on or after October 1, 2002, applicant should check the USPTO web site for the current fees before submitting the payment. The USPTO Internet address for the fee schedule is: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of any fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after October 1, 2002 (or mailed with a certificate of mailing on or after October 1, 2002), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: Commissioners of Patents and Trademarks Washington, D.C. 80231

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08/08/2002

JENNIFER WAHLSTEN RAE-VENTER LAW GROUP, P.C. 260 SHERIDAN AVE, SUITE 440 PALO ALTO, CA 94306

EXA	AMINER
NELSO	ON, AMY J
ART UNIT	CLASS-SUBCLASS
1638	800-278000

DATE MAILED: 08/08/2002

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/984,099	12/03/1997	KEVIN MCBRIDE	CGNE-115-1-U	1773

TITLE OF INVENTION: COTTON FIBER TRANSCRIPTIONAL FACTORS

Match and Return

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE	ı
nonnrovisional	NO	\$1280	02	\$1280	11/08/2002	•

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A. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

1:

B. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

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☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

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Page 1 of 4

Match and Return

PART B - FEE(S) TRANSMITTAL

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CURRENT CURRESPONDENCE ADDRESS (Note: Leppiny mark-up with any corrections of use block T)

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08/08/2002

JENNIFER WAHLSTEN RAE-VENTER LAW GROUP, P.C. 260 SHERIDAN AVE, SUITE 440 PALO ALTO, CA 94306 Note: A certificate of mailing can only be used for domestic mailings of the Fec(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(a) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in the Roy Legue Ees address above or being Statismine.

ove, or being racsimile	transmitted to the USPTO, on the date indicated below.
(Depositor's name)	
(Signature)	
(Date)	

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/984,099	12/03/1997	KEVIN MCBRIDE	CGNE-115-1-U	1773

TITLE OF INVENTION: COTTON FIBER TRANSCRIPTIONAL FACTORS

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nonprovisional	NO	\$1280	\$0	\$1280	
EXAMINER		ART UNIT	CLASS-SUBCLASS		
NELSON, AMY J		1638	800-278000		
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			2. For printing on the patent fi the names of up to 3 registered or agents OR, alternatively, (2 single firm (having as a men attorney or agent) and the na registered patent attorneys or a is listed, no name will be printed	d patent attorneys 2) the name of a nher a registered ames of up to 2 gents. If no name	
ASSIGNEE NAME AND	RESIDENCE DATA TO	BE PRINTED ON THE	PATENT (print or type)		
PLEASE NOTE: Unless a been previously submitted (A) NAME OF ASSIGNE	to the USPTO or is being a	ubmitted under separate	rill appear on the patent, Inclusion to cover. Completion of this form is	of assignee data is only appropriate NOT a substitute for filing an assignee COUNTRY.	te when an assignment.

Please check the appropriate assignee category or categories (will not b	be printed on the patent)				
a. The following fee(s) are enclosed:	4b. Payment of Fec(s):				
☐ Issue Fee	☐ A check in the amount of the fee(s) is enclosed.				
□ Publication Fee	Payment by credit card. Form PTO-2038 is attached. The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number(enclose an extra copy of this form).				
Advance Order - # of Copies					
Commissioner for Patents is requested to apply the Issue Fee and Publi	ication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.				
Authorized Signature) (Date)	·				
NOTE: The Issue Fee and Publication Fee (if required) will not be other than the applicant; a registered attorney or agent; or the as interest as shown by the records of the United States Patent and Trade	ssignee or other party in				
This collection of information is required by 37 CPR 1.311. The mobtain or retain a benefit by the public which is to file (and by the application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFI estimated to take 12 minutes to complete, including gathering, preper completed application form to the USPTO. Time will vary dependence. Any comments on the amount of time you require to consuggestions for reducing this burden, should be sent to the Chief It Patent and Trademark Office, U.S. Department of Commerce, Wash NOT SEND FEES OR COMPLETED FORMS TO THIS A Commissioner for Patents, Washington, DC 20231.	e USPTO to process) an FR 1.14. This collection is saring, and submitting the ding upon the individual emplete this form and/or information Officer, U.S. hinston, D.C. 20231. DO				

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EXAMINER				
NELSO	NELSON, AMY J			
ART UNIT	CLASS-SUBCLASS			
1638	800-278000			

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Page 1 of 4

PTOL-85 (REV. 04-02) Approved for use through 01/31/2004.



UNITED STATES PATENT AND TRADEMARK OFFICE

United States Department of Commerce United States Patent and Trademark Office Address: Commissioner of Patents and Trademark Washington, D.C. 2021

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
08/984,099	12/03/1997	KEVIN MCBRIDE	CGNE-115-1-U	1773
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JENNIFER WAHLSTEN		NELSON, A	MY J	
RAE-VENTER LA 260 SHERIDAN A			ART UNIT	PAPER NUMBER
PALO ALTO, CA 94306 UNITED STATES			1638	<u> </u>
OMITED STATES			DATE MAILED: 08/08/2002	

Determination of Patent Term Extension under 35 U.S.C. 154 (b) (application filed after June 7, 1995 but prior to May 29, 2000)

The patent term extension is 0 days. Any patent to issue from the above identified application will include an indication of the 0 day extension on the front page.

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Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)



United States Patent and Trademark Office

United States Department of Commerce United States Patent and Trademark Office Address: Commissioner of Patents and Trademark Washington, D.C. 2023

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75	90 08/08/2002		EXAMIN	ER
JENNIFER WAHLSTEN		•	NELSON, A	MY J
RAE-VENTER LA 260 SHERIDAN A			ART UNIT	PAPER NUMBER
PALO ALTO, CA 94306 UNITED STATES		•	1638	
			DATE MAILED, 00/00/0000	

Notice of Fee Increase on October 1, 2002

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2002, then the amount due may be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on October 1, 2002. See Revision of Patent and Trademark Fees for Fiscal Year 2003: Notice of Proposed Rulemaking. 67 Fed. Reg. 30634, 30636 (May 7, 2002). Although a change to the amount of the publication fee is not currently proposed for October 2002, if the issue fee or publication fee is to be paid on or after October 1, 2002, applicant should check the USPTO web site for the current fees before submitting the payment. The USPTO Internet address for the fee schedule is: http://www.uspto.gov/main/howtofees.htm.

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Effective October 1, 2002, 37 CFR 1.18 is proposed to be revised to change the patent issue fees as set forth below. As stated above, the final fees may be a different amount, and applicant should check the web site given above when paying the fee.

(a) Issue fee for issuing each original or reissue patent, except a design or plant patent:

By a small entity (Sec. 1.27(a))--\$655.00 By other than a small entity--\$1,310.00

(b) Issue fee for issuing a design patent:

By a small entity (Sec. 1.27(a))-\$235.00 By other than a small entity-\$470.00

(c) Issue fee for issuing a plant patent:

By a small entity (Sec. 1.27(a))--\$315.00 By other than a small entity--\$630.00

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Page 4 of 4

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE

Commissioner for Patents Washington, D.C. 20231 (703)746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks I through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block I, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up, with any corrections or use Block T) lote: A certificate of mailing can only be used for domestic mailings of the Fec(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. JENNIFER WAHLSTEN RAE-VENTER LAW GROUP, P.C. Certificate of Mailing or Transmission I hereby certify that this Fec(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile 260 SHERIDAN AVE, SUITE 440 PALO ALTO, CA 94306 transmitted to the USPTO, on the date indicated below. (Depositor's name (Signature (Date) APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 08/984,099 12/03/1997 KEVIN MCBRIDE CGNE-115-1-U 1773 TITLE OF INVENTION: COTTON FIBER TRANSCRIPTIONAL FACTORS APPLN. TYPE SMALL ENTITY ISSUE FEE PUBLICATION FEE DATE DUE TOTAL FEE(S) DUE nonprovisional NO \$1280 \$0 \$1280 11/08/2002 **EXAMINER** ART UNIT **CLASS-SUBCLASS** NELSON, AMY J 1638 800-278000 1. Change of correspondence address or indication of "Fee Address" (37 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. single firm (having as a member a registered attorney or agent) and the names of up to 2 ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer** registered patent attorneys or agents. If no name is listed, no name will be printed. Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (B) RESIDENCE: (CITY and STATE OR COUNTRY) (A) NAME OF ASSIGNEE Please check the appropriate assignee category or categories (will not be printed on the patent) ☐ individual ☐ corporation or other private group entity ☐ government 4a. The following fce(s) are enclosed: 4b. Payment of Fee(s): ☐ A check in the amount of the fee(s) is enclosed. ☐ Issue Fee Payment by credit card. Form PTO-2038 is attached. ☐ Publication Fce ☐ The Commissioner is hereby authorized by charge the required fec(s), or credit any overpayment, to Deposit Account Number ______(enclose an extra copy of this form). ☐ Advance Order - # of Copies Commissioner for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. (Authorized Signature) (Datc)

NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, D.C 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.





Notice of Allowability

Application No. **08/984,099**

Applicant(s)

Art Unit

Amy Nelson

1638

Kevin McBride, et al.



--The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course.

Examiner

(or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. X This communication is responsive to amendment filed 6/19/02 2. X The allowed claim(s) is/are Claims 1-10, 12-16, 18-26, 28, 30-33, 36, 37, 42, 44-55, 59, 65, and 66 FENUMBERED 25 Claims 1-4,28,29,36,37,40-47,30,31,24,25,4,19-22,32,33,23,10-16,34,35,39,39 3. The drawings filed on _ are accepted by the Examiner. 4. Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). a) 🔲 Ali b) Some* c) None of the: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. \square Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). *Certified copies not received: 5. Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). (a) The translation of the foreign language provisional application has been received. 6. Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 7. X A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. 8. X CORRECTED DRAWINGS must be submitted. (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) \square hereto or 2) \square to Paper No. (b) including changes required by the proposed drawing correction filed approved by the examiner. (c) X including changes required by the attached Examiner's Amendment/Comment or in the Office action of Paper No. 19 Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson. 9. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1 X Notice of References Cited (PTO-892) 2 Notice of Informal Patent Application (PTO-152) 3 Notice of Draftsperson's Patent Drawing Review (PTO-948) 4 X Interview Summary (PTO-413), Paper No 27, 30. 5 Information Disclosure Statement(s) (PTO-1449), Paper No(s). 6 X Examiner's Amendment/Comment Examiner's Comment Regarding Requirement for Deposit of Biological 8 X Examiner's Statement of Reasons for Allowance Material

9 Other

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Application/Control Number: 08/984,099

Art Unit: 1638

EXAMINER'S AMENDMENT

1. An extension of time under 37 CFR 1.136(a) is required in order to make an examiner's amendment which places this application in condition for allowance. During a telephone conversation conducted on July 16, 2002, Alissa Eagle requested an extension of time for 1 MONTH(S) and authorized the Commissioner to charge Deposit Account No. 13-4125 the required fee of \$520 for this extension and authorized the following examiner's amendment. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. The application has been amended as follows:

In the Claims:

Claims 34, 35, 38, 39, 57, 67 and 68 have been canceled.

Claim 1 (six times amended). A <u>recombinant DNA</u> sequence comprising as operably joined components in the direction of transcription, a cotton fiber transcriptional initiation region functional in a cotton fiber cell and an open reading frame encoding [a protein] <u>an enzyme</u> in a pigment biosynthesis pathway, wherein said transcriptional initiation region is selected from the group consisting of:

- a. nucleotides 65-4163 of SEQ ID NO:7, and
- b. SEQ ID NO:15.

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Claim 9 (twice amended). A DNA construct comprising [a] the DNA sequence of

Claim 1.

Claim 12 (twice amended). A cotton plant cell comprising the DNA construct of Claim 9.

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Claim 13 (twice amended). A cotton plant comprising the cell of Claim 12.

Claim 14 (five times amended). A method of modifying fiber color in a cotton plant, said method comprising:

transforming a cotton plant cell with a DNA construct comprising a DNA sequence comprising I) a sequence selected from the group consisting of SEQ ID NO:15 and nucleotides 65-4163 of SEQ ID NO:7, and ii) an open reading frame encoding a protein selected from the group consisting of tyrosinase, tryptophanase and indole oxygenase;

regenerating a <u>cotton</u> plant comprising fiber tissue from said <u>cotton</u> plant cell, wherein said fiber tissue comprises a substrate for said protein, and wherein said protein reacts with said substrate to produce a pigment, whereby the color of said fiber is modified.

Claim 18 (four times amended). [The method of Claim 16 wherein said plant cell is further transformed] A method of modifying fiber color in a cotton plant, said method comprising:

transforming a cotton plant cell with a first DNA construct comprising a DNA sequence comprising I) a sequence selected from the group consisting of SEQ ID NO:15 and nucleotides 65-4163 of SEQ ID NO:7, and ii) an open reading frame encoding a protein selected from the group consisting of tyrosinase, tryptophanase and indole oxygenase;

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transforming said cotton plant cell with a second DNA construct according to Claim 9 or

and regenerating a cotton plant comprising fiber tissue from said cotton plant cell,
wherein said fiber tissue comprises a substrate for said protein, and wherein said protein reacts
with said substrate to produce a pigment, whereby the color of said fiber is modified, and
wherein the open reading frame of the DNA sequence from the first DNA construct encodes a
different protein than the open reading frame of the second DNA construct.

Claim (amended). The method of Claim wherein said pigment is melanin and said [proteins are encoded by] open reading frames are tyrA and ORF438.

Claim 20 (amended). The method of Claim 18 wherein said pigment is indigo and said [proteins are encoded by] open reading frames are tna and pig.

Claim 22 (twice amended). The method of Claim 14 wherein said fiber tissue is [obtained from a cotton] in the burr.

Claim 44 (five times amended). A recombinant DNA sequence comprising as operably joined components in the direction of transcription: a transcriptional initiation region functional in a cotton plant cell and an open reading frame encoding an enzyme in a biosynthetic pathway of melanin or indigo, wherein said transcriptional initiation region is selected from the group consisting of:

- a. nucleotides 65-4163 of SEQ ID NO:7, and
- b. SEQ ID NO:15.

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Art Unit: 1638

Claim 51 (twice amended). [The] A DNA construct comprising the DNA sequence of Claim 44.

10 34 St. Claim 53 (twice amended). A cotton plant cell comprising the DNA construct of Claim

38 Claim 54 (twice amended). A cotton plant comprising the plant cell of Claim 53.

Claim 59 (thrice amended). [A] An isolated DNA sequence comprising a transcriptional initiation region functional in a cotton plant cell, wherein said transcriptional incitation region is selected from the group consisting of:

- a. nucleotides 65-4163 of SEQ ID NO:7, and
- b. SEQ ID NO:15.

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3. The following is an examiner's statement of reasons for allowance:

A sequence search revealed that SEQ ID NO:15 is identical to the rac13 5' upstream sequence disclosed in Figure 5 of WO 96/40924 and enabled as a promoter in Example 1 of U.S. Patent 6,166,301. Hence, SEQ ID NO:15, as disclosed in the instant application is enabled as a promoter *per se*. The 4-4 5' upstream region comprising nucleotides 65-4163 of SEQ ID NO:7 is enabled as a promoter by the combined teachings of Examples 5, 7, and 9 in the instant specification, as clarified in Applicant's response filed 2/19/02. Furthermore, because the 4-4 cDNA sequence of SEQ ID NO:1 was used as a probe to isolate the genomic clone comprising the promoter of SEQ ID NO:7, and the Rac13 cDNA sequence of SEQ ID NO:12 was used as a probe to isolate the genomic clone comprising the promoter of SEQ ID NO:15 (see Examples 2 and 4), the isolated DNA sequences of SEQ ID NO:1 and SEQ ID NO:12 are likewise enabled by the instant specification.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Oath/Declaration

4. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not state that the person making the oath or declaration in a continuation-in-part application filed under the conditions specified in 35 U.S.C. 120 which discloses and claims subject matter in addition to that disclosed in the prior copending application, acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

Although Applicant has satisfied the duty to disclose requirement with respect to U.S. Application Serial No. 08/480,178, Applicant has not satisfied the requirement with respect to PCT Application PCT/US96/09897, of which the instant application is a continuation-in-part application.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy J. Nelson whose telephone number is (703) 306-3218. The examiner can normally be reached on Monday-Friday from 8:30 AM - 5:00 PM.

The fax phone number for this Group is (703) 308-4242 or (703) 305-3014.

Any inquiry of a general nature or relating to the status of this application, or if the examiner cannot be reached as indicated above, should be directed to the legal analyst, Gwendolyn Payne, whose telephone number is (703) 305-2475.

AMY J. NELSON, PH.D SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1600

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Amy J. Nelson, Ph.D. July 17, 2002

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Notice	of	Allowability	

Application No. 08/984,099

Applicant(s)

Kevin McBride, et al.

Examiner

Amy Nelson

Art Unit 1638

The MAILING DATE of this communication appears on the c	over sheet with the correspondence address
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAI (or previously mailed), a Notice of Allowance (PTOL-85) or other approprise THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. the initiative of the Office or upon petition by the applicant. See 37 CFR	ate communication will be mailed in due course. This application is subject to withdrawal from issue at
1. 🖾 This communication is responsive to <u>amendment filed 6/19/02</u>	•
2. X The allowed claim(s) is/are Claims 1-10, 12-16, 18-26, 28, 30	-33, 36, 37, 42, 44-55, 59, 65, and 66 .
2. 図 The allowed claim(s) is/are <u>Claims 1-10, 12-16, 18-26, 28, 30</u> 「たいいかいても まってしたい。 1-8,28,24,36,37,40~47, 3 3. □ The drawings filed on are accepted by t	0, 31, 64, 25, 4, 14, -22,32, 33, 23, [0 - 16, 34, 35] he Examiner. 38,39,17,18,26,27)
4. Acknowledgement is made of a claim for foreign priority under	
a) 🗌 All b) 🗎 Some* c) 🗎 None of the:	
1. Certified copies of the priority documents have been rece	eived.
2. Certified copies of the priority documents have been rece	elved in Application No
3. Copies of the certified copies of the priority documents happlication from the International Bureau (PCT Rule 1)	7.2(a)).
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8. X CORRECTED DRAWINGS must be submitted.	
(a) \square including changes required by the Notice of Draftsperson's	Patent Drawing Review (PTO-948) attached
1) \square hereto or 2) \square to Paper No	•
(b) \(\sum \) including changes required by the proposed drawing correct approved by the examiner.	tion filed, which has been
(c) including changes required by the attached Examiner's Ame Paper No. <u>19</u> .	endment/Comment or in the Office action of
Identifying indicis such as the application number (see 37 CFR 1.84(c)) shouleach sheet. The drawings should be filed as a separate paper with a transmit	d be written on the drawings in the top margin (not the back) of ttal letter addressed to the Official Draftsperson.
9. DEPOSIT OF and/or INFORMATION about the deposit of BIOLO attached Examiner's comment regarding REQUIREMENT FOR TO	GICAL MATERIAL must be submitted. Note the HE DEPOSIT OF BIOLOGICAL MATERIAL.
Attachment(s)	_
Notice of References Cited (PTO-892)	2 Notice of Informal Patent Application (PTO-152)
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5 Information Disclosure Statement(s) (PTO-1449), Paper No(s).	6 X Examiner's Amendment/Comment
 Examiner's Comment Regarding Requirement for Deposit of Biological Material 	8 🗶 Examiner's Statement of Reasons for Allowance
9 Other	

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Application/Control Number: 08/984,099

Art Unit: 1638

EXAMINER'S AMENDMENT

- 1. An extension of time under 37 CFR 1.136(a) is required in order to make an examiner's amendment which places this application in condition for allowance. During a telephone conversation conducted on July 16, 2002, Alissa Eagle requested an extension of time for 1 MONTH(S) and authorized the Commissioner to charge Deposit Account No. 13-4125 the required fee of \$520 for this extension and authorized the following examiner's amendment. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
- 2. The application has been amended as follows:

In the Claims:

Claims 34, 35, 38, 39, 57, 67 and 68 have been canceled.

Claim 1 (six times amended). A recombinant DNA sequence comprising as operably joined components in the direction of transcription, a cotton fiber transcriptional initiation region functional in a cotton fiber cell and an open reading frame encoding [a protein] an enzyme in a pigment biosynthesis pathway, wherein said transcriptional initiation region is selected from the group consisting of:

- a. nucleotides 65-4163 of SEQ ID NO:7, and
- b. SEQ ID NO:15.

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Claim 9 (twice amended). A DNA construct comprising [a] the DNA sequence of Claim 1.

Claim 12 (twice amended). A cotton plant cell comprising the DNA construct of Claim 9.

Claim 13 (twice amended). A cotton plant comprising the cell of Claim 12.

Claim 14 (five times amended). A method of modifying fiber color in a cotton plant, said method comprising:

transforming a cotton plant cell with a DNA construct comprising a DNA sequence comprising I) a sequence selected from the group consisting of SEQ ID NO:15 and nucleotides 65-4163 of SEQ ID NO:7, and ii) an open reading frame encoding a protein selected from the group consisting of tyrosinase, tryptophanase and indole oxygenase;

regenerating a <u>cotton</u> plant comprising fiber tissue from said <u>cotton</u> plant cell, wherein said fiber tissue comprises a substrate for said protein, and wherein said protein reacts with said substrate to produce a pigment, whereby the color of said fiber is modified.

Claim 18 (four times amended). [The method of Claim 16 wherein said plant cell is further transformed] A method of modifying fiber color in a cotton plant, said method comprising:

transforming a cotton plant cell with a first DNA construct comprising a DNA sequence comprising I) a sequence selected from the group consisting of SEQ ID NO:15 and nucleotides 65-4163 of SEQ ID NO:7, and ii) an open reading frame encoding a protein selected from the group consisting of tyrosinase, tryptophanase and indole oxygenase;

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transforming said cotton plant cell with a second DNA construct according to Claim 9 or 10;

and regenerating a cotton plant comprising fiber tissue from said cotton plant cell.

wherein said fiber tissue comprises a substrate for said protein, and wherein said protein reacts

with said substrate to produce a pigment, whereby the color of said fiber is modified, and

wherein the open reading frame of the DNA sequence from the first DNA construct encodes a

different protein than the open reading frame of the second DNA construct.

Claim 19 (amended). The method of Claim 18 wherein said pigment is melanin and said [proteins are encoded by] open reading frames are tyrA and ORF438.

Claim 20 (amended). The method of Claim 18 wherein said pigment is indigo and said [proteins are encoded by] open reading frames are tna and pig.

Claim 22 (twice amended). The method of Claim 14 wherein said fiber tissue is [obtained from a cotton] in the burr.

Claim 44 (five times amended). A recombinant DNA sequence comprising as operably joined components in the direction of transcription: a transcriptional initiation region functional in a cotton plant cell and an open reading frame encoding an enzyme in a biosynthetic pathway of melanin or indigo, wherein said transcriptional initiation region is selected from the group consisting of:

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Claim 51 (twice amended). [The] A DNA construct comprising the DNA sequence of Claim 44.

Claim 53 (twice amended). A cotton plant cell comprising the DNA construct of Claim 51.

Claim 54 (twice amended). A cotton plant comprising the plant cell of Claim 53.

Claim 59 (thrice amended). [A] An isolated DNA sequence comprising a transcriptional initiation region functional in a cotton plant cell, wherein said transcriptional incitation region is selected from the group consisting of:

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Application/Control Number: 08/984,099 Page 6

Art Unit: 1638

3. The following is an examiner's statement of reasons for allowance:

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 1638

Oath/Declaration

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The oath or declaration is defective because:

It does not state that the person making the oath or declaration in a continuation-in-part application filed under the conditions specified in 35 U.S.C. 120 which discloses and claims subject matter in addition to that disclosed in the prior copending application, acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

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Application/Control Number: 08/984,099

Art Unit: 1638

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Gwendolyn Payne, whose telephone number is (703) 305-2475.

AMY J. NELSON, PH.D SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1600

Amy J. Nelson, Ph.D.

July 17, 2002